ENVIRONMENTAL CHECKLIST

Purpose of Checklist:

The State Environmental Policy Act (SEPA), chapter 43.21C RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the agency identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the agency decide whether an EIS is required.

Instructions for Applicants:

This environmental checklist asks you to describe some basic information about your proposal. Governmental agencies use this checklist to determine whether the environmental impacts of your proposal are significant, requiring preparation of an EIS. Answer the questions briefly, with the most precise information known, or give the best description you can.

You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write "do not know" or "does not apply." Complete answers to the questions now may avoid unnecessary delays later.

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the governmental agencies can assist you.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Use of checklist for nonproject proposals:

Complete this checklist for nonproject proposals, even though questions may be answered "does not apply." IN ADDITION, complete the SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS (part D).

For nonproject actions, the references in the checklist to the words "project," "applicant," and "property or site" should be read as "proposal," "proposer," and "affected geographic area," respectively.

A. BACKGROUND

1. Name of proposed project, if applicable:

Powerhouse Sand, Gravel and Rock Sale - Board of Natural Resources Approval for Auction
(Phase One SEPA review)

2. Name of applicant: Washington State Department of Natural Resources (DNR)

3. Address and phone number of applicant and contact person:

Bob Suda
Business System Support Division
1111 Washington Street
P.O. Box 47014
Olympia, WA 98504-7014

Phone: 360-902-1642

4. Date checklist prepared: June 14, 2001 - DRAFT Amended Checklist

5. Agency requesting checklist: Washington State Department of Natural Resources (DNR)

6. Proposed timing or schedule (including phasing, if applicable):

This proposal is the initial administrative stage of a proposed long-term sand, gravel, and rock mining project. If the proposal move forward, this initial stage could be complete by January 2002. If the project proceeds, other administrative work, planning, and environmental review would follow, and after relevant permits have been issued, the physical, on-the-ground stage of the project would take place over approximately 17-20 years. The proposed "Powerhouse" mining operation would include a sand and gravel removal site and a proximal but separate hard rock quarry site. The sand and gravel removal and the rock removal would most likely be concurrent.

The proposed project is suitable for phased environmental review under WAC 197-11-060(5) and would be reviewed in two phases. Each phase requires an independent environmental threshold determination. For convenience, they are referred to in this checklist as Phase One and Phase Two.

Phase One review is for a decision by the Washington State Board of Natural Resources (Board) to approve the sale of sand, gravel and rock from "Powerhouse" site through a sale agreement that would allow access to the site for 20 years. The decision under review in Phase One would authorize DNR to offer a sale through auction. It would not authorize mining activities. DNR is the lead agency in this initial phase of the environmental review, per Washington Administrative Code (WAC) 197-11-926.

This checklist is for Phase One only, and as such addresses only the potential and general environmental impacts of the proposal, because the specific mining plans have not yet been developed.

A date for the proposed auction would not be set until the approval for auction is confirmed by the Board and public comments are considered.

Phase Two review would address the specific plans developed by the party that purchases the lease at the auction approved in Phase One. (This assumes there is approval of the auction and a successful bidder.) This phase of SEPA environmental review would begin when the purchaser submits applications for mining permits, with the specific details of the mining proposal.

DNR and Snohomish County have agreed that the County would be the lead agency for this second or "project" phase under WAC 197-11-942. Other agencies of jurisdiction have been notified of this decision. The County would issue a threshold determination for the development, operating and reclamation plans (mining plans) proposed by the purchaser. The County may issue a Determination of Significance which would require an Environmental Impact Statement (EIS) be prepared on the proposed mining plans. DNR anticipates that an EIS may be required, given the scale, duration and potential for impact(s) from the project proposal.

The purchaser would be responsible for obtaining all the required regulatory permits. All conditions imposed by the permits, regulations and rules would need to be met before any mining project can proceed. In addition to the comment period associated with Phase One, the Phase Two environmental review would allow a number of opportunities for public comment and input. An EIS, if required, would consider among other elements the various alternatives to any mining plans proposed by the purchaser.

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

Yes. It is expected that approval of this proposal (to sell valuable materials by auction) would result in offering the valuable materials (sand, gravel, rock) in these state trust lands for sale by auction. If a successful bidder (purchaser) was found, the state would enter into a sale agreement with the purchaser.

The purchaser would apply for necessary permits, and if Phase Two environmental review is completed and permits are issued, segmental mining of the sand/gravel removal area and quarrying of the rock area could commence. When reclaiming the site, the purchaser would be required to meet or exceed the requirements of the surface mining permit. After mining and reclamation are complete, the site is expected to be used again for commercial forestry (its present use).

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

Existing Information

- A DNR report contains information regarding quality and volume of gravel, as well as limited groundwater information, obtained from four test holes drilled on the site (1995).

- Studies of the site done by CSR/Asociated Sand and Gravel (1997) include a hydrologic characterization report, a soils report, a wetland reconnaissance and impact evaluation. These studies were done for an Environmental Impact Statement (EIS) that considered the Powerhouse site as an alternative site to a proposed Granite Falls sand, gravel and rock site. (The conceptual mine plan completed under this previous EIS does not necessarily reflect or represent how the Powerhouse site would be developed under the current proposal.)

- A DNR Habitat Conservation Plan-Management Activity Summary (HCP-MAS) report has been completed for this proposal. The report addresses DNR's commitments to protect species listed as threatened or endangered under the federal Endangered Species Act.

- SEPA Checklists and DNR Habitat Conservation Plan-Management Activity Summary (HCP-MAS) reports have been completed or are in progress for past and current timber sales over portions of the proposal and surrounding areas. These checklists and reports address DNR's commitments to protect species listed as threatened or endangered under the federal Endangered Species Act. The timber sales are part of ongoing DNR forestry management activities, and are related to this proposal by their physical location.

- Information regarding threatened and endangered species in and near the proposal area is available from Washington State Department of Fish and Wildlife and the Snohomish County Public Utility District (PUD), including details of fisheries in the adjacent streams. The PUD has accumulated data on and has an ongoing study of fish populations in the Sultan River and other tributaries near the Jackson Powerhouse. This date is available on the PUD website: www.snopud.com/water/jhpfish.htm.

Anticipated Information

- If the proposed project advances to the planning and permitting stage, and if an EIS is required during Phase Two SEPA review, that EIS would require detailed hydraulic, engineering, and traffic impact studies as well as other data gathering to address all anticipated significant adverse impacts of the mining project.

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

Yes. The Snohomish County Public Utility District (PUD) is planning a new waterline upgrade for the City of Sultan. This is proposed along the eastern margin of the gravel sale area, adjacent to the PUD's powerhouse facility access road. (See attached map.) The PUD is currently applying for regulatory permits to move forward with the project, although DNR does not know which specific permits are included or what stage the permitting process is in.

10. List any government approvals or permits that will be needed for your proposal, if known.

A sale agreement may be developed with the successful bidder if the materials are auctioned by DNR. No permits are needed for this administrative stage proposal (Phase One SEPA review). The following regulatory permits are expected to be needed for the "physical project" stage (Phase Two SEPA review):

- Surface Mining Reclamation Plan and Permit, Washington Department of Natural Resources.
- Conditional Use Permit and possible rezone to MC zoning, Snohomish County.
- Notice of Construction and Application for Approval from the Puget Sound Air Pollution Control Agency.
- Haul Route Agreement, Snohomish County Department of Public Works
- Washington State Department of Ecology Sand and Gravel General permit which covers NPDES permit for storm water discharge, as well as groundwater discharge
- Water Right permit, if needed, with Washington State Department of Ecology
- Forest Practices Permit, Washington State Department of Natural Resources
- Washington State Dept of Fish and Wildlife Bald Eagle Nest Management Plan.
- Exclusion under the HCP for individual sand and gravel operations larger than 40 acres, Washington Department of Natural Resources
- Blasting Permit, Washington State Department of Labor and Industries

- Washington State Department of Transportation road improvement approval, if needed.
- Wetland fill permit, if needed, U.S. Army Corps of Engineers

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

DNR is proposing the approval of the sale of sand, gravel and rock from the approximately 600-acre Powerhouse site near Sultan (see map). The sale would be through a sale agreement that includes allowing access to the site for 20 years and that requires some specific as well as general mitigation measures. The gravel and rock materials sale would be offered at auction. This proposal is limited to the Board of Natural Resources' decision to approve auction of the materials (Phase One SEPA review).

The proposed lease would require the purchaser to receive the appropriate permits before any mining begins. Application for these permits would trigger the Phase Two SEPA review (the "project" phase). The documentation required for these permits would include the detailed plans for mining and reclaiming the site. These plans are to be developed by the purchaser and are not covered by this checklist or Phase One review, but would be covered in Phase Two review.

While this proposal (auction approval - Phase One review) consists of only the administrative decision to auction the rights to purchase sand, gravel and rock from this site, the proposal does consider the later physical stage of the project (mining and reclamation - Phase Two review), including the following:

- Roughly 44 million cubic yards of sand and gravel are in the site. The actual area and depth of any gravel removal would be conditioned by environmental constraints such as the groundwater level and setbacks from streams, unstable slopes, wetlands and other environmentally sensitive areas. The exact volume and acreage of total disturbance would be determined during the purchaser's project planning and permitting efforts, in the Phase Two environmental review, where the details of the constraints to mining would be established.

- Mining could expose a large area to erosion as well as potentially create a large visual impact. In order to mitigate these potential impacts, sequential mining and reclamation would be required by the DNR mining contract. This would limit surface disturbance to segments of no more than 40 acres at a time in the sand and gravel removal area. County permit requirements may further limit the size of surface disturbance at any one time. Under this condition, the majority of the removal area would be vegetated. This would minimize surface exposure to erosion and would also limit the area of forest removed, which would provide a noise and visual barrier. The sand and gravel mining would be accomplished by scooping and loading. No blasting would be required for the sand and gravel removal.

- Approximately 1.6-2.0 million cubic yards of hard rock could be removed from a 40- to 50-acre portion of the site on the western side of Haywire Ridge. This would require drilling, blasting and crushing. As this activity could pose a potential source of noise and create a potential visual impact, this site was selected on the west face of the ridge in order to limit exposure to inhabited areas to the north and south. This site was selected to mitigate these impacts. Conditions imposed by the permitting process would limit blasting to certain times of the day and restrict blast frequency to mitigate noise disturbance from this source.

- Rock, sand and gravel removal would occur over an estimated 17- to 20-year period. The proposed mine area is shown in the attached map. Mining would occur in segments of no more than 40 acres at a time after removal of existing replanted forest. Before gravel and rock is removed, soil would be removed and stockpiled for reclamation. Reclamation of the site(s) would accommodate the planned subsequent use, commercial forestry. Preliminary reclamation and operation plans would be required from bidders at the time of the auction. A detailed reclamation plan would be required later from the purchaser (Phase Two SEPA review).

- Removal of sand, gravel and rock may pose potentially adverse environmental impacts to the groundwater if excavation is allowed within the aquifer. To eliminate the potential adverse impacts, gravel removal would be limited to a depth not less than ten feet above the high groundwater level.

- A minimum fifty-foot set-back from property boundaries (in which no removal may take place) would be required to allow for mitigation measures such as construction of earthen berms. These measures would provide a noise and visual barrier during the removal of materials, mitigating those environmental impacts. Hours of operation, truck haul routes, and other operating considerations would be determined by Snohomish County during the permitting process and Phase Two environmental review. These issues would be addressed to mitigate potential noise, traffic and other social concerns.

- Transportation of sand, gravel and rock would likely create truck traffic impacts on local access roads and State Highway 2. Study of alterative methods of transportation and/or access routes would be essential to the project proposal. The truck haul route(s), and the frequency and duration of use would be determined in the Phase Two environmental review.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

The location of this proposal is from 0.5 to 2.2 miles north of the town of Sultan, within portions of Sections 17, 19, 20, 29, 30, T 28N, R08E, WM., Snohomish County. The site is east of the Sultan River. Location maps are attached.

a. Identify the water resource inventory area (WRIA), WRIA sub-basin, and the watershed administrative unit (WAU).

WRIA: Snohomish

WRIA Sub-basin: Lower Skykomish-Pilchuck

WAU: Sultan River (Sub-basin 4)

B. ENVIRONMENTAL ELEMENTS

1. Earth

a. General description of the site (circle one): Flat, <u>rolling,</u> hilly, steep slopes, mountainous, other.

The gravel removal area covers rolling, topography but adjoins high-relief topography along the Sultan River and along the flanks of Haywire Ridge.

b. What is the steepest slope on the site (approximate percent slope)?
The steepest slopes (approximately 70 percent slope) are located along the escarpment along the Sultan River drainage. A setback from these slopes would be required to mitigate the potential for slope failure. The actual setback distance would be determined from engineering studies completed in the planning and permitting stage of the project (Phase Two review), if that stage is reached. Also, in the hard rock portion of the proposed pit, the grade of the existing terrace slope is approximately 50 percent.

A general slope stability assessment of the western exposure of the terrace gravels along the Sultan River drainage was completed by the DNR and indicates that unstable slopes are present.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland.

Soil #	Soil Name	% Slope	% of Sale Area	Mass Wasting Potential	Surface Erosion Potential
1991	Everett sandy gravelly loam	0-8	58	Insignt.	Low
1997	Everett sandy gravelly loam	8-15	02	Insignt.	Low

6604	Ragnar fine sandy loam	0-8	02	Insignt	Low
8105	Tokul gravelly loam	8-15	10	Insignt	Low
8108	Tokul Winston gravelly loam	25-65	10	Insignt	Med
9146	Winston gravelly loam	0-3	08	Insignt.	Med
5657	Olomount gravelly loam	0-3	03	Insignt	Low
8112	Tokul-Ogarty-Rock complex	25-65	07	Insignt.	Low

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

Yes. Unstable slopes are noted on the western edge of the sand and gravel terrace, on the escarpment along the Sultan River. Slides have occurred on the sides of the steep terrace on the south and northwest of the property, associated with springs below the sand and gravel, near the contact with the till.

Immediately to the north of the proposed gravel removal area, a slope failure occurred on the slopes above the PUD Jackson Powerhouse. This failure apparently resulted from saturation of the slope after a surface water diversion. This was mitigated by terracing and additional vegetation of the failed area, and modifying surface water flow to that area. The PUD continues to monitor the site for any additional slope failure.

e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.

During the proposed project's mining stage (following Phase Two review), up to 44 million cubic yards of sand and gravel along with as much as 2.8 million cubic yards of topsoil could be excavated. The imposed segmented mining (maximum of 40 acres at a time) would restrict the volume removed and the volume of topsoil stockpiled at any given time. In addition, access roads would be constructed. Grading and filling of these roads would be necessary. The material used for roads would be native material, either local gravel or rock. Regrading of these surfaces would be required for reclamation.

Local material would be used for reclamation. The reclamation plan would require that prior to gravel removal, topsoil would be removed and retained on-site for use during reclamation.

Acreage of Roads:

Do not know. The number of acres that can be developed as roads would be dictated by an approved plan of operations and the permitting constraints placed on the proposal during the planning and permitting stage (Phase Two review). If the project proceeds and mining occurs, the amount of area covered by roads is expected to vary as different segments of the site are mined and reclaimed.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

Yes. Erosion could result from the clearing of vegetation, pit development, exposure of sand, gravel and soil, and road construction. Erosion would be mitigated by use of detention/settling ponds, interceptor swales and other Best Management Practices (BMP) to minimize erosion. These requirements would be identified in the plan of operations for the material sale agreement during the project planning phase. The mitigation activities would also be guided by the operating and reclamation plans approved by the County and DNR, as well as by the Department of Ecology Sand and Gravel General Discharge Permit.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

Do not know. The percentage of the site that will be covered would not be known until the project plans are proposed and approved. At completion of the project, the site is expected to be returned to commercial forest, but some impervious surfaces such as a road may remain, but it would be a very small percentage of the site. The amount of temporary and permanent impervious surfaces would be determined during the project planning stage (Phase Two review).

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

All necessary measures would be taken to control erosion during these activities. These could include directing water and any sediments created in the operation, by means of ditches and culverts to settling/detention ponds and use of interceptor swales. Re-vegetation of reclaimed areas would occur within 30 days of grading an area for reclamation, and vegetation of soil stockpiles and any berms would be required. Appropriate use of silt fencing, hay bales and other Best Management Practices (BMP) measures would also be employed to assure compliance with any regulatory constraints as imposed during the planning and permitting phase.

2. Air

a. What types of emissions to the air would result from the proposal (i.e., dust, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.

Dust and other particulate matter (PM) are expected to be generated from blasting, rock removal, rock screening, crushing and washing activities, material drying, truck and earthmoving equipment, as well as hauling and transportation. Other possible sources of PM are conveyor belt transport of material, rock drying equipment and material storage piles. The amount of dust and PM generated would depend on the specific types of equipment used and the volume of material that is handled. These are not known at this time, but would be a component of the proposed operating plan presented to the County and the Conditional Use Permit (Phase Two SEPA review). The amount of dust and PM that would be generated needs to be addressed in the Phase Two SEPA review.

Exhaust from diesel-powered equipment and vehicles would contribute carbon monoxide, nitrogen oxides, sulfur oxides, and PM..

Possible slash burning following timber harvest or clearing could be a source of smoke.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

Yes. Trucks hauling the sand, gravel and rock from the site would be a source of vehicle exhaust emissions.

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

Mitigation measures for emissions would vary according to the source of emissions. These measures may include wetting or applying other dust suppressant on roads, or paving of portions of roads. For emissions from equipment, wet suppression techniques include application of water, wetting chemicals, and/or foam at crusher or conveyor feed and/or discharge points. Dry filtering equipment also may be used to mitigate PM emissions. Spray systems on storage piles, and spraying and covering of conveyors are effective methods to suppress PM. Fabric filters and cyclones may be used on material drying equipment. Limiting vehicle movement to a minimum would also minimize how much dust is generated. Specific mitigation measures would be determined by the Puget Sound Clean Air Agency (PSCAA) during the permitting stage.

Proper vehicle and equipment maintenance and repair would minimize emissions and odor from on-site and off-site vehicle operations. Other mitigation methods would be determined during the project development stage (Phase Two SEPA review).

Any slash burning would require a burn permit. Grinding slash instead of burning it could mitigate impacts. Mitigation methods would be determined during the project development stage (Phase Two SEPA review).

3. Water

a. Surface:

1. Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

Yes. The Sultan River, a Type 1 stream, is located a minimum distance of 400 feet from the sand and gravel removal area (see map). It flows into the Skykomish River at the City of Sultan.

Winters Creek, a Type 3 stream, is a generally well-defined creek east of the east-central portion of the gravel deposit area. The PUD road on the eastern portion of the site may lie on the trace of the original stream bed. At one point in the gravel removal area, Winters Creek loses containment and flows into the porous gravel soils, then re-emerges. At least some of the creek's flow source is off-site to the east. Changes in the flow of the creek could affect the flow in the springs to the south of the property. Winters Creek flows to the Sultan River, joining it west of Sultan.

In the vicinity of the proposed hard rock site, there are six Type 5 streams and one Type 3 stream (Cascade Creek). Cascade Creek flows into the Sultan River. The Type 5 streams have short water courses. They flow for a minimal distance and then dissipate onto the forest floor.

A cedar-forested wetland is present in the area of the rock removal site at the west and northwest base of Haywire Ridge. Additional road development crossing the wetland to access the proposed quarry area may be required. Filling in a portion of the wetland for additional road and/or conveyor access may be needed.

A small area of wetlands near the gravel removal area may be affected by the gravel removal. These southeastern wetlands were apparently created as a result of road construction along the PUD asphalt road.

The proposed hard rock site is near the City of Sultan watershed. This watershed is currently the sole water supply for the City of Sultan. It provides up to 2 million gallons of water per day.

2. Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

Do not know yet. The detailed plans developed by the purchaser during the planning and permitting stage (Phase Two SEPA) would identify specific potential for impacts and the need for mitigation. Any proposed impacts to Winters Creek, Cascade Creek, and/or the Sultan River would be guided by the restrictions of impacts to these water types under the HCP and DNR Forest Practices rules. Disturbance may impact the small wetland in the southern portion of the gravel removal area, and rock removal may impact portions of the wetlands adjacent to the rock quarry site. The exact acreage of impact to the wetlands cannot be determined at this stage since there is no definitive boundary yet of the 100-year flood plain.

3. Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

Do not know the amount of material at this time. The amount would be determined in planning and permitting stages of the project (Phase Two SEPA review). The areas that may be affected are the cedar- forested wetlands adjacent to the proposed hard rock removal area and possibly the wetlands in the southeastern portion of the sand and gravel removal area. Any fill material used would be derived from local native sources. No material from outside of the permit area would be allowed on the site, to prevent undue contamination with off-site material.

4. Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

Do not know. If surface water is collected in detention ponds, it may be proposed to be used by the potential operator for dust suppression or to wash sand and gravel. Granting of water rights would be needed from the Washington Department of Ecology if this action is proposed.

5. Does the proposal lie within a 100-year flood plain? If so, note location on the site plan.

Do not know. The exact limits of the 100-year flood plain for Winters Creek have not been accurately established. Further study would be needed and would be completed in the planning and permitting stage (Phase Two review).

6. Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

No. Waste waters derived from washing of excavated materials may be recycled through settling ponds and returned to wash plants.

b. Ground:

1. Will ground water be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximate quantities if known.

Do not know. Some water may be needed for rock washing material and for dust suppression, depending on the techniques used. The source and amount of water required is not known at this stage. The water use requirements would be based on the scale of operation and the particular water demands of the proposed plan of operation. The purchaser would then need to develop a plan to satisfy the water requirements. To use more than 5,000 gallons of water from any source, the purchaser would need to obtain water rights.

Water is likely to be discharged into the groundwater by percolation of stormwater, and possibly, process water. These discharges to groundwater would be covered under the Washington Department of Ecology Sand and Gravel General Discharge Permit, which regulates contaminated discharge levels. Direct percolation of stormwater and use of siltation ponds and percolation pits would be used as per the above-mentioned permit. Monitoring and periodic sampling of any discharge may be required by the permit to insure that groundwater quality is maintained.

2. Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals...; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

Sanitary waste systems would be required for employees. To mitigate the impacts to the groundwater, portable toilets for employee use would be used to the extent possible. As the number of workers is not known, there is potential need for a septic tank and wastewater drain-field system. However, the necessity of such a septic system cannot be determined at this time. Such a system would require a permit from the Snohomish County Health Department.

c. Water Runoff (including storm water):

1. Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

Runoff would consist mainly of rain/stormwater. In the sand and gravel area, most stormwater would likely percolate through the porous sand and gravel material. Any stormwater flow would be channeled to storage impoundments and percolate to the groundwater. The groundwater may appear as springs along the Sultan River drainage, or may enter Winters Creek which ultimately drains into the Sultan River. Any point source or channeled water entering Winters Creek would be monitored under requirements of the Washington Department of Ecology Sand and Gravel General Discharge Permit.

2. Could waste materials enter ground or surface waters? If so, generally describe.

Process water from dust suppression and/or rock processing activities (washing, or screening) may percolate into the groundwater. Minor amounts of petroleum products could enter the groundwater from motorized equipment, vehicle leaks or accidental spills.

d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any:

Surface water

DNR has entered into a Habitat Conservation Plan (HCP) with U.S. Fish and Wildlife Service and National Marine Fisheries Service as an alternative method of complying with the Endangered Species Act on 1.6 million acres of state trust lands. The HCP provides DNR guidance and direction for protection of endangered and threatened species and also provides guidance for management activities adjacent to streams.

The HCP requires a minimum setback distance for activities near streams:

- For Type 1 streams like the Sultan River, the HCP requires a horizontal setback equal to the site-potential height of a 100-year-old tree (possibly up to 218 feet) and measured from the level of the 100-year flood plain as delineated by study. An additional 100-foot windthrow buffer may be required if study shows it is needed.
- For Type 3 streams like Winters Creek, the HCP requires a setback equal to the site-potential height of a 100-year-old tree (possibly up to 218 feet) and measured from the level of the 100-year flood plain as delineated by study. A possible 50-foot windthrow buffer to the riparian management zones, may be required if the stream is greater than 5 feet wide.
- Should Type 4 streams later be identified on the proposed site, a 100-foot setback from the 100-year flood plain level would be required.

These should be considered minimum setback distances to provide protection from impacts to these waters.

Gravel removal would not be allowed within 200 feet of the Winters Creek 100-year flood level, where the creek flows on the surface. Disturbance would not occur within 400 feet of the Sultan River 100-year flood plain level or within in the river's channel migration zone, which ever is greater.

Stormwater

Much of the stormwater infiltrates through the pervious soils on the site. Stormwater would be controlled using Best Management Practices (BMP). Mitigation methods may include use of interceptor swales and diversion ditches above excavated areas to prevent run-on of stormwater. The BMPs would direct stormwater flow to be dispersed to vegetated areas or to catchment basins, infiltration galleries, settling or detention ponds. Any discharge may be required to be monitored by the operator under the Department of Ecology (DOE) Sand and Gravel General Discharge Permit. Specific mitigation measures would be determined by the Department of Ecology permit.

Groundwater

To mitigate potential groundwater contamination, any fixed or portable gas or diesel-powered equipment such as crushing, screening or material-drying equipment would be placed on impervious surfaces or other barriers to prevent leaks from reaching the groundwater. Machinery repair would be required to be completed over impervious surfaces using an oil/water separator. A spill prevention, containment and control plan would be required as a BMP. If fuel storage is allowed on the site, an above-ground lined containment structure capable of containing 110% of the contents of the tank would be required. Additional measures would likely be imposed in the Phase Two SEPA review and project planning and permitting stage.

Wetlands

To mitigate possible impacts to the wetlands, construction and use of a crossing would utilize erosion control and stormwater runoff best management practices (BMPs) such as silt fencing, retention, paving and/or other appropriate measures. Any crossings (roadway/access) of wetland areas would be oriented to minimize the impacted area. Specific impacts and mitigation measures to wetlands and associated wetland buffer areas would be addressed during Phase Two SEPA review, through the plan of operations, Snohomish County critical areas assessments, and Washington State Department of Ecology (DOE) Sand and Gravel Discharge General Permit requirements.

Restoration or replacement of wetland areas, if needed, would follow standard protocols required by the Army Corps of Engineers, Snohomish County and the Washington State Department of Ecology. Possible on-site replacement of wetlands with wetlands of the same character may be used to mitigate impacts to these critical areas. Snohomish County Critical Areas Regulation would expect 1:1 replacement ratio or better.

4. Plants

a. Check or circle types of vegetation found on the site:

deciduous tree: alder, maple, aspen, cottonwood, birch, other:
evergreen tree: Douglas fir, pine, hemlock, Pacific silver fir, yellow cedar, redcedar, other:
shrubs: huckleberry, salmonberry, other: salal, Oregon grape, red elderberry, maple
grass
pasture
crop or grain
wet soil plants: cattail, buttercup, bullrush, skunk cabbage, devil's club, other:
water plants: water lily, eelgrass, milfoil, other:
other types of vegetation: sword fern, moss

b. What kind and amount of vegetation will be removed or altered?

In the proposed gravel removal area: 12-25 year-old replanted forest of Douglas-fir, western hemlock, and western redcedar.

In the proposed rock removal area: western hemlock, douglas-fir, western redcedar, red alder, maple, and black cottonwood.

All vegetation, with the possible exception of merchantable timber harvested off the site, would be part of a reclamation plan that would be developed under the surface mine permit and Phase Two SEPA review.

c. List threatened or endangered species known to be on or near the site.

The TRAX system, a DNR internal tracking system for historical artifacts, plant and flora and significant species of concern, indicates four occurrences of "Plant Species or Natural Areas" in a Section adjacent to the proposal. Two of these species are listed as "Natural Heritage Wetlands" and two are listed as "Plant Community." These are associated with Woods Lake, located on the other side of the Sultan River, approximately 1 (+) miles away. As they are away from potential transportation routes, these would not be impacted by the proposed operations. DNR TRAX system indicates no other known, threatened, endangered, or special concern plant species.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

The surface mine and reclamation plan would require planting of native grasses and/or shrubs and tree seedlings.

5. Animals

a. Circle any birds and animals which have been observed on or near the site or are known to be on or near the site:

birds: hawk, heron, eagle, songbirds, pigeon, other:
mammals: deer, bear, elk, beaver, other:
fish: bass, salmon, trout, herring, shellfish, other:

b. List any threatened or endangered species known to be on or near the site.

DNR's TRAX data indicates two occurrences of marbled murrelets in an adjacent section about a mile away from the proposal. These occurrences were classified as "Status 4," which means the birds were observed or heard flying over the area. The proposed project site is close to the Sultan River, which is used in the winter by eagles for foraging. This is not a high use area, and there are no known nests in the area. No impact to murrelets and eagles are expected by this proposed operation are anticipated.

Threatened or endangered fish species are known to be present in the Sultan River. These include bull trout and chinook salmon. The Snohomish County PUD has collected a volume of data regarding these threatened species in the Sultan River and has summarized the data on its website. Other salmon and trout species that are not endangered or threatened are noted to spawn in the lower reaches of the Winters Creek or use the lower reaches of this tributary as a juvenile rearing area (per verbal communications with the PUD fish biologist and Washington Department of Fish and Wildlife fish biologist). As stated earlier, HCP stream buffers and setbacks would apply to both the Sultan River and Winters Creek.

c. Is the site part of a migration route? If so, explain.

No. The site is not known to be part of a migration route. The Sultan River, adjacent to the site, is used as migration route for salmonid populations and other fish.

d. Proposed measures to preserve or enhance wildlife, if any:

Mine reclamation would include replanting of native grasses and/or shrubs and tree seedlings. Segmental mining would limit the area of disturbed ground to 40 acres, which would limit the area without vegetation at any given time.

Measures to protect the fish-bearing stream would include limiting the depth of mining as to not impact the groundwater flows. Use of toxic or hazardous materials other than fuel would be restricted from the site, eliminating the possibility of contamination from these types of materials. Restricting the use of asphalt and concrete batch plants from the site would also help accomplish this objective.

A minimum mining setback from Winters Creek and the Sultan River would be required to eliminate direct contamination of these streams by silt and fine sediment, per the rules of the HCP and DNR Forest Practice Rules. Use of settling ponds and percolation pits and other best management practices would be required to prevent thermal and sedimentation effects to the water flow. The details and particular designs of these measures cannot be determined at this time. These would be presented in the plan of operation and development plans to be designed by the purchaser, should this proposal reach that stage. Those plans would be subject to Phase Two SEPA review.

6. Energy and Natural Resources

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

Electricity may be needed for heating and lighting of buildings, for electrical equipment, and for lighting of outdoor areas. Diesel fuel and/or gasoline would be needed for motorized equipment. The amount and specific energy needs would not be known until a development plan is designed by the purchaser and specific equipment types are determined.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

No.

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

Does not apply at this stage.

7. Environmental Health

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so describe.

Yes. Use of explosives would be expected to occur in the hard rock excavation area should this proposal reach that stage. The use of explosives may be restricted by the Conditional Use Permit. Use of explosives would follow policies and procedures under Title 30, Chapter 1, Section 57.6 of the Mine Safety and Health Administration Regulations and Standards, and the Washington State Department of Labor and Industries Explosives Licencing Sections.

1. Describe special emergency services that might be required
Does not apply at this stage.

2. Proposed measures to reduce or control environmental health hazards, if any:
Does not apply at this stage.

b. Noise

1. What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?
None.

2. What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

All noises would be considered long-term, if the proposal goes forward. In the sand and gravel area, excavation equipment, crushing, sorting, conveying equipment and transportation vehicles would all produce high levels of noise. In the rock quarry area, blasting, though more sporadic, would also contribute some occasional high noise levels. Trucks hauling the materials would elevate noise levels off site. Noise would occur over normal daytime working hours.

3. Proposed measures to reduce or control noise impacts, if any:

To mitigate potential noise impacts, earthen berms and vegetation barriers would be placed around the operations to reduce noise level to the surrounding environment. Noise reduction devices would be used on all equipment. Hours of operations would be limited by the County to minimize noise impacts to the surrounding community. Chapter 18.54 Snohomish County Code limits hours of operations to 7 AM. to 5:30 P.M., Monday through Saturday. Other methods to minimize noise impacts may be proposed in the project permitting and development process by the County.

8. Land and Shoreline Use

a. What is the current use of the site and adjacent properties?

Current use of the proposed site and adjacent state parcels is commercial forestry. An adjacent landowner, the PUD, operates a power generation facility on the Sultan River. A water line for the City of Sultan water supply and a PUD access right of way crosses the eastern margin of the proposed sand and gravel area.

To the east of the site, much of the adjacent land is used as commercial forest. Other areas to the southeast are used as residential property. A number of residences are present along 116th Street, which is used as the current access to the property.

b. Has the site been used for agriculture? If so, describe.

No.

c. Describe any structures on the site.

None.

d. Will any structures be demolished? If so, what?

Do not know. No structures currently exist on the site, and any temporary ones connected to the proposed mining operation have not been identified. These, however, would be removed at the end of the operation.

e. What is the current zoning classification of the site?

Commercial forestry, which allows gravel removal as a conditional use.

f. What is the current comprehensive plan designation of the site?

370 acres of the sand and gravel area are designated mineral conservation (MC) land based on the large quantity of high quality sand and gravel material. This area covers the SW¼ of Section 20, the E½SE¼ Section 19, E½NE¼ Section 30 and the NW¼ Section 29, T28N, R08E. The remainder of the proposed site is designated commercial forestry.

g. If applicable, what is the current shoreline master program designation of the site?

Does not apply.

h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.

Yes. The slopes along the Sultan River drainage in the western portion of the proposed sand and gravel removal area are considered sensitive areas based on the potentially unstable nature of the slopes. Impacts to these sensitive areas would be mitigated by avoiding mining activity in these areas. The exact distance of mining activity setback from these sensitive slopes would be determined after engineering studies have been completed in the planning and permitting stage (Phase Two SEPA review).

The wetlands described in Section 3 of this checklist are also considered critical or sensitive areas. Mitigation measures to address impacts to those critical areas are proposed in that section.

i. Approximately how many people would reside or work in the completed project?

Do not know. Since the planned subsequent use of the site is commercial forestry, no residences would exist, and any work would be temporary.

j. Approximately how many people would the completed project displace?

Does not apply.

k. Proposed measures to avoid or reduce displacement impacts, if any:

Does not apply.

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

Through the process of obtaining a Snohomish County conditional use permit and other required permits, such as the Surface Mine Reclamation Permit, a reclamation plan would be developed to address the current and projected use of the site, which is commercial forestry. The plan and permits would be considered under Phase Two environmental review.

9. Housing

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

None.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

None..

c. Proposed measures to reduce or control housing impacts, if any:

Does not apply.

10. Aesthetics

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

Do not know. Any structures would be proposed in planning and permit stage (Phase Two review). Structures associated with this proposal would be temporary.

b. What views in the immediate vicinity would be altered or obstructed?

Residences across the Sultan River, about one mile from the proposal would potentially be able to see the western portion of the proposed gravel operation. This view would be in the far background for these residences.

c. Proposed measures to reduce or control aesthetic impacts, if any:

In some instances, visual impact would be mitigated by leaving trees and other vegetation as a visual barrier. In other instances, vegetated berms may be employed to screen the mining activity. These requirements would be refined when the County requires the purchaser to complete the SEPA "project" phase (Phase Two).

Also, the hard rock pit area was selected to minimize visual impacts; the Sultan River escarpment obstructs the line of sight to nearby residences. Views from the north may be impacted by the rock quarry activity, but vegetation buffers may minimize these impacts.

Due to the long-term nature of this proposal, it is difficult to predict exactly what other measures may be taken to control impacts.

11. Light and Glare

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

Light sources may be needed during the shorter winter days. Vehicle and haul traffic may use headlights during this period of time in the early morning and early evening, depending on the hours of operation.

b. Could light or glare from the finished project be a safety hazard or interfere with views?

No. Once any mining of the proposed project area is complete, the subsequent use of the site is intended to be commercial forestry. During mining activity some lights could affect views during the winter months.

c. What existing off-site sources of light or glare may affect your proposal?

None.

d. Proposed measures to reduce or control light and glare impacts, if any:

Vegetation and earthen berms would be used as visual barriers to minimize light and glare to the extent possible. Other methods may be proposed in the project and permitting stage.

12. Recreation

a. What designated and informal recreational opportunities are in the immediate vicinity.

Hunting, fishing, and off-road-vehicle use.

b. Would the proposed project displace any existing recreational uses? If so, describe.

Yes, but not permanently. Hunting, hiking and unauthorized dirt bike use currently occur on the site. These activities would be displaced if mining proceeds because of safety and liability issues. Access to this state trust land is restricted to prevent fires and illegal waste disposal.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

The current recreational uses could return after completion of the proposed mining. This does not mean, however, that currently unauthorized uses would be authorized.

13. Historic and Cultural Preservation

a. Are there any places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site? If so, generally describe.

Yes. TRAX indicates the existence of "Archaeological/Historical" site within Sections 8 and 19 in T28N, R8E. Both locations were verified with the Office of Historic and Archeological Preservation (OHAP) as being of no significance to this proposal. That is, the proposal would not impact those sites .

b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.

See 13.a., above.

c. Proposed measures to reduce or control impacts, if any:

In the event that other historic or archaeological sites or artifacts are discovered during the permitting phase, OHAP and the local tribes would be consulted.

14. Transportation

a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.

Current access to the proposed site is 116th Street from Sultan Basin Road, which accesses State Highway 2. During the planning and permitting stage (Phase Two SEPA review), other access routes may be designed and proposed, and traffic impact studies would be completed by the purchaser. Studies

also may be required to identify traffic patterns, alternative transportation routes, and viable methods of material movement other than the obvious conventional routes.

b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?

No. Distance to nearest stop not known.

c. How many parking spaces would the completed project have? How many would the project eliminate?

Does not apply.

d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).

Do not know yet. Transportation of gravel and rock from the site presents one of the most significant potential impacts of the gravel mining proposal. The proposal may require additional access from the property to county roads other than the present access, or it may consider other methods of transportation in order to minimize the impact of transporting gravel from the site through residential areas. Additionally, road improvements to existing roads, particularly the Sultan Basin Road may be needed to accommodate the haul truck weight and frequency. However, the exact form of transportation, haul routes and traffic volume generated from any operation would be determined through the permitting process (Phase Two SEPA review).

Traffic study data has been collected by the Washington Department of Transportation for the intersection of Sultan Basin Road and State Highway 2 in 1998 and in 2000. These data indicate that State Highway 2 has traffic volume of up to 25,000 vehicles per day. Roughly 30 percent of that traffic load is truck traffic, including gravel trucks from existing operations. Any proposed operation could add as much as 4 percent to that volume.

Working with the Snohomish County Public Works and the Washington Department of Transportation to identify transportation needs and issues would help to mitigate transportation impacts during the permitting process.

e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

Yes. Rail use is possible given the presence of a rail line along Highway 2, through the Town of Sultan. Whether this is a feasible transportation option is not known. Water and air transport are not options for this proposal.

f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.

No daily vehicular trips would be generated by the completed project. However, a high number of trips by haul trucks, and other traffic would occur during the course of any mining operation. The exact number of trips is not known at this time. An estimate could be as much as 250 or more truck trips per day as well as an unknown number of worker commuting trips, depending on the scale of operation, type of haul trucks and other factors that would be established during the planning and permitting stage (Phase Two SEPA review).

The amount of daily truck volume, hours of operation, the transportation routes to be used and other specific information necessary to complete a meaningful traffic study also are not yet known. The purchaser would propose a transportation plan which would define these elements and which would be available for public comment during the permitting process (Phase Two SEPA review).

g. Proposed measures to reduce or control transportation impacts, if any:

If the proposal proceeds, planning transportation routes and methods that minimize impacts to residential areas and traffic patterns would be an important part of the planning and permitting stage (Phase Two SEPA review).

Methods to mitigate impacts would be designed and developed under the guidance of the Snohomish County Public Works, the Washington Department of Transportation and other agencies. Other transportation methods and routes of transportation would be considered by the purchaser. Updated traffic pattern studies would be needed to aid in planning transportation routes and in mitigating these impacts, including the need for any road improvements as may be required by the permitting process.

15. Public Services

a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.

Does not apply at this time.

b. Proposed measures to reduce or control direct impacts on public services, if any.

Does not apply at this time.

16. Utilities

a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other.

None.

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

Does not apply at this time.

C. SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Completed by _____, Date _____

Title _____